

<b>Notice of Allowability</b>	Application No. 10/705,184 Examiner Zakiya N. Walker	Applicant(s) MANDAL, BATAKRISHNA Art Unit 3672
-------------------------------	---	---

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to Applicant's response filed 2/3/05.
2.  The allowed claim(s) is/are 12-14, 16, 18-20 and 22-34.
3.  The drawings filed on 11 November 2003 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 02032005
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 30, 32, 33, 34, and 35 have been renumbered 30-34 (see attached).

### **REASONS FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance: the prior art of record, including newly cited Sheridan et al., Wright, Kimball et al., and Birchak et al. references, and including applicant cited Tello et al. and Rambow, fail to teach or suggest a tool for measuring fluid properties that includes a processor coupled to an acoustic transducer that calculates theoretical reverberations and relates received reverberations with theoretical reverberations to determine fluid properties of claim 12, or a tool for measuring fluid properties that includes an acoustic transducer configured

to receive acoustic signal reflections and reverberations from a metal disk or metal plate as called for in claims 23 and 29.

Newly cited Sheridan et al. reference includes a testing device having a transducer configured to receive ultrasonic pulse reflections from a metal plate to determine thickness of the plate. Wright teaches a device to determine cement bond or casing thickness. Kimball et al. teaches a method of calculating impedance of material using acoustic pulse. Birchak et al. teaches an acoustic device for measuring fluid properties using an ultrasonic transducer. However, the references fail to teach or suggest, alone or in combination, a tool for measuring fluid properties that includes a processor coupled to an acoustic transducer that calculates theoretical reverberations and relates received reverberations with theoretical reverberations to determine fluid properties of claim 12, or a tool for measuring fluid properties that includes an acoustic transducer configured to receive acoustic signal reflections and reverberations from a metal disk or metal plate as called for in claims 23 and 29.

Applicant cited Tello et al. teaches a method that includes reflecting signals from a plate to determine fluid properties. Rambow teaches a method and apparatus for detecting fluid flow behind an acoustically reflective structure. However, the references fail to teach or suggest, alone or in combination, a tool for measuring fluid properties that includes a processor coupled to an acoustic transducer that calculates theoretical reverberations and relates received reverberations with theoretical reverberations to determine fluid properties of claim 12, or a tool for measuring fluid properties that

Art Unit: 3672

includes an acoustic transducer configured to receive acoustic signal reflections and reverberations from a metal disk or metal plate as called for in claims 23 and 29.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zakiya N. Walker whose telephone number is (571) 272-7039. The examiner can normally be reached on Monday-Friday, 8:30 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Zakiya N. Walker  
Primary Examiner  
Art Unit 3672

zw  
May 10, 2005

(attachment)